

## **2008 Snoqualmie River Levee Rehabilitations King County, Washington**

### **FINDING OF NO SIGNIFICANT IMPACT**

**1. Background.** Under the Federal levee rehabilitation assistance authority of Public Law 84-99, the U.S. Army Corps of Engineers, Seattle District, is proposing to repair levee damage at four sites along the Snoqualmie River (Mason Thorson Ells at river mile (RM) 47, Mason Thorson Extension at RM 46, and McElhoe-Pearson at RM 23, as well as one site at the mouth of the Raging River (Raging River Bridge to Mouth, where it enters the Snoqualmie at about RM 36), in King County. Work will be done beginning in July 2008. These sites incurred damage during flooding that occurred as a result of a "pineapple express" rain event in November 2006. The storm originated in the tropical Pacific Ocean, and included rainfall of up to 13 inches over a 36-hour period in parts of western Washington. This heavy rain event caused peak flows of 67,000 cubic feet per second in the Snoqualmie River.

**2. Proposed Action.** The rehabilitation efforts described in the preferred alternative would repair the damaged areas of the levees to their pre-flood condition and level of protection. These levees are integral to protecting life, safety, and property, including public facilities, private residences and farmland in floodplains along the river. The Corps has determined that if the four segments of the Snoqualmie River levees are not repaired before the next flood event, each segment would present an imminent threat of loss of private and/or public property. The flood season in the Snoqualmie basin typically begins November 1 of each year. It is essential that the levees be restored to their pre-flood condition before November 2008, in order to minimize risk of compounded levee damage and possible breaching, which could have major consequences to life, health, safety, and property.

- **Raging River Bridge to Mouth.** Repair at this location will include removal of the materials moved into position by the landowner and re-establishment/reconstruction of the levee approximately fifteen feet landward of the present location. The western end of the setback levee will tie in to the existing Raging River levee at the existing 4-foot diameter culvert; the eastern end will tie in to the existing Snoqualmie River levee. The repaired segment will be approximately 100 linear feet (lf). New material will be brought in for the toe due to flood erosion of pre-existing toe. Sixty trees will be planted in the former riverward footprint area as the levee is set back.

- **McElhoe-Pearson.** The proposed repair will restore the levee to pre-flood conditions by repairing the crest and landward slope damage for approximately 750 lf. Site 1 requires repairing 200 lf of damage due to overtopping and restoring a driving surface on the crown of the levee. Site 2 requires re-grading of 550 lf of landward slope and restoring armor protection. Twenty-five trees will be planted parallel to the landward face of the levee.

- **Mason Thorson Ells.** The proposed repair will address 400 lf of damaged toe and lost armor rock, and will consist of restoring the grading of the riverward toe-to-crown slope to pre-flood dimensions, replacing toe material to reestablish toe protection, incorporating two lifts of native riparian vegetation and replacing riverward riprap armor. Additionally, 80 trees will be planted at an off-site riparian location along the Middle Fork Snoqualmie River.

- **Mason Thorson Extension.** The proposed repair will consist of grading 150 lf of the riverward toe-to-crown slope to pre-flood dimensions, replacing toe material to reestablish toe protection, replacing riverward riprap armor, and incorporating two lifts of native riparian vegetation.

**3. Impacts Summary.** An environmental assessment providing an evaluation of the potential environmental impact as a result of repairing these four levees has been completed. A Notice of Preparation of the environmental assessment was posted for a 30-day public comment period ending June 5, 2008. No comments were received. Impacts due to the repair of these four levees are considered to be primarily temporary and to be non-significant, for the following reasons. Vegetation loss will be minor at three of the four sites. Only one site, Mason Thorson Ells, will require substantial vegetation removal and that removal is expected to be offset by both onsite and offsite plantings. However, there will be a temporal lag in replacement of full function, as all the mitigative plantings will be saplings; shade, and input of nutrients, organics and insects would be reduced for a period of several years. To a considerable extent, this temporal lag will be addressed through over-compensation in the numbers and types of vegetation planted at the four project sites and at King County's Three Forks Park; the balance of the temporal lag effect is expected to be non-significant. All in-water work will occur within the WDFW approved fish window. Disturbances due to noise created by machinery are expected to be temporary. The Corps is currently consulting with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (the Services) on findings of likely to adversely affect listed species of fish at Mason Thorson Ells due to impacts of vegetation removal, and may affect, but not likely to adversely affect listed species for Mason Thorson Extension, McElhoe-Pearson, and Raging River Bridge to Mouth. However, based on the mitigative planting both onsite at Mason Thorson Ells and offsite plantings on the same stretch of stream (planting of trees at greater than 3:1 replacement value, on the south side of the Middle Fork of the Snoqualmie), it is not anticipated that the action will jeopardize any of the listed species of fish in the system. The Corps coordinated necessary cultural resource investigations and has concluded that no historic properties would be affected. No wetlands will be filled or impacted during the rehabilitation of these levees. There will be *de minimis* air quality impacts from construction, which will add an inconsequential increment to climate change through creation of greenhouse gases. Levee repair will likely continue to encourage economic growth in the area, with cumulative impacts including continued riparian impacts. For the County to retain eligibility for its levees in the Corps' PL 84-99 rehabilitation assistance program, it will need to remove additional vegetation through effort outside the scope of this Federal project, adding to cumulative riparian and river habitat impacts; however, the contribution of the Corps' rehabilitation activities, including vegetation removal as well as vegetation replacement plantings, will not add a significant increment to the effect of past, present and future activities on these levee systems.

#### **4. Permits and Approvals.**

a. **ESA.** The Corps has submitted a Biological Assessment of expected effects to threatened species of fish, to the U.S. Fish and Wildlife Service, and to the National Marine Fisheries Service. The Corps is authorized, pursuant to the Section 7 consultation regulation at 50 CFR 402.05, to proceed with the project under the existing "emergency circumstances" even in the absence of a completed consultation. In fulfillment of its underlying Section 7 obligation to ensure that the project is not likely to jeopardize the continued existence of a listed species or

result in the destruction or adverse modification of designated critical habitat, the Corps has made agency determinations that the construction at the Mason Thorson Ells site is likely to adversely affect Puget Sound Chinook, Puget Sound steelhead, and Coastal/Puget Sound bull trout; and that the construction at the Mason Thorson Extension, Raging River Bridge to Mouth, and McElhoe-Pearson sites may affect, but is not likely to adversely affect, those three species. These conclusions take into account the temporary disturbance effects of construction as well as the impacts of vegetation removal, while also considering the ameliorative effects of on-site and off-site mitigation plantings. Based on planned mitigation, and coordination with the Services in advance for the adverse effect from work at Mason Thorson Ells, it is anticipated that the Services will not make a jeopardy determination concerning this work. The Corps commits to fully funding and performing all Reasonable and Prudent Alternatives necessary to avoid the likelihood of jeopardy to listed species or destruction or adverse modification of designated critical habitat, as well as Reasonable and Prudent Measures (RPMs) necessary and appropriate to minimize the impact of Incidental Take, that are described in a Biological Opinion is received from the Services. The Environmental Assessment will be reevaluated at the time that consultation is complete. If necessary, the EA will be supplemented with necessary and applicable corresponding modifications to the scope and/or nature of the project, the procedures and practices used to implement the project, and/or the type and extent of compensatory mitigation associated with the project.

b. **Clean Water Act.** The proposed action constitutes repair of existing structures, within their original footprints. Under Section 404(f)(1)(B), the Corps' emergency reconstruction of recently damaged parts of levees does not require a Clean Water Act Section 404 evaluation, provided that the work is conducted for maintenance purposes. Analogizing to 33 Code of Federal Regulations section 323.4(a)(2), rehabilitation may not include any modification that changes the character, scope, or size of the original fill design in a manner that affects the waters of the U.S.. Concerning scope and size, the proposed repairs will not require a Section 404(b)(1) evaluation, as long as the footprint of the levee repairs that falls within waters of the United States is no larger than the pre-damage footprint. All work on these projects will be conducted outside the limits of Section 404; or will result in restoration of the pre-existing levee profile, will remain within the existing footprint, and will be conducted with the same character and materials. Since the application of Section 404 is not required, a Section 401 water quality certification from the Department of Ecology is not required.

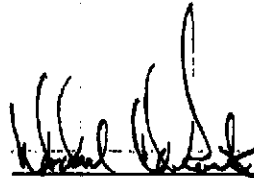
c. **Coastal Zone Management Act, and King County Shoreline Management Plan.** A CZMA consistency determination is appended to the Environmental Assessment as well, and concludes that the work is consistent to the maximum practicable extent with the enforceable provisions of the State coastal zone management program, as reflected in the King County Shoreline Management Code (King County Code, Title 25). Through application by analogy of the Washington Department of Ecology's regional conditions for Nationwide Permit 3 under the Clean Water Act, because no Clean Water Act Sec. 401 review is triggered and because the work at each site falls within the parameters of NWP 3, the State of Washington has pre-determined its concurrence that the proposed actions are consistent.

d. **National Historic Preservation Act.** An evaluation was conducted pursuant to Sec. 106 of the NHPA. Coordination is taking place with affected tribes and with the Washington Dept. of Archeological and Historic Preservation. No archeological resources have been identified in the project area. The Corps has prepared a Section 106 compliance report and submitted it to the Washington State Historic Preservation Officer (SHPO), the Snoqualmie

Tribe, and the Tulalip Tribe for their review. The Corps has enclosed a letter with the report requesting that the SHPO concur with a determination of No Historic Properties Affected for the four proposed 2008 Snoqualmie levee rehabilitation sites. No archaeological monitoring is recommended at any of the repair sites. The Corps will comply with the conditions contained in any MOA negotiated between the Corps and the SHPO. Should the SHPO not concur with the Corps' finding of no effect, the EA will be reevaluated.

**5. Conclusion.** I have determined that the proposed action is in accordance with the environmental documentation, and that planning for this project complies with all applicable laws, regulations, and agency consultations, including the Clean Water Act and National Environmental Policy Act. Based on the analysis described above and provided in more detail in the Environmental Assessment, this project is not a major federal action significantly affecting the quality of the human environment, and therefore does not require the preparation of an environmental impact statement.

Date 22 June 2006



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